THE ANSWER to the second question, which seems to be addressed to the GAZETTE, is almost self-evident. *There is no self-constituted authority.* He only can be recognized as such whose knowledge and aptitude seem to his fellows to deserve the distinction. The judge does not make himself a judge; he is called to the bench by those who think him qualified to decide nice questions. The GAZETTE recognized Dr. Engelmann as an authority on the Cactaceæ of this country. Why? Not because he proclaimed himself such, but because he knew much about these plants through wide observation and exhaustive study, coupled with a special aptitude for exact and critical research. On a general question, such as that of nomenclature, we recognize as an authority the man who has had experience in untangling its knots, and who has shown himself judicious and accurate as well as acute. We distrust an attempt by a novice, even though he is using "his best bibliographic and analytic ability" to decide the questions of nomenclature which may be raised in a list of a thousand species. But the GAZETTE will warmly welcome the effort of these "young, misguided enthusiasts" to study questions of more limited scope — even questions of nomenclature in restricted groups of plants, provided they take proper pains and time in the study.

On the other hand, good intentions, independence, and a desire to do something are not enough. The now notorious "Farmer's-Alliance judge" in Kansas 'struggled along', 'doing the best he could', 'differed from an authority' (the Supreme Court), 'honestly' (no doubt), 'submitted his efforts to the test of time and the correction of wider and abler research,' and — made himself a laughing-stock for the country! So some botanists undertake a jurist's decisions without even legal training, and the result is quite as ludicrous.

CURRENT LITERATURE.

A Flora of Texas.

With the commencement of volume II, the contributions from the National Herbarium take on a new character. Hitherto we have had lists and catalogues of the plants of certain remote regions of our country, with here and there the descriptions of new species of plants these have been valuable in their way, but in the present contribution we have not only everything a list would include, but in addition a complete manual, helpful alike to the botanical student who will find in it a guide and a stimulus, and to the older botanist who has hitherto

been obliged to search through *Plantæ Wrightianæ*, *Plantæ Lindheimerianæ*, *Plantæ Fendlerianæ* and dozens of other papers for the information which this work presents in compact form.[1]

The present publication covers the Polypetalæ and is the forerunner of others which will present our present knowledge of the Flora of Western Texas, of whose vegetation so much remains to be known. The National Herbarium deserves the praise of all botanists for undertaking such a valuable project for making known the flora of remote regions. When this area is completed there are other regions that equally demand attention before the flora of our domain is thoroughly made known. On the other hand the botanical students of Texas are laid under deep obligations to the National Herbarium for furnishing a manual of their flora, and ought to be stimulated in the collection of material and notes that will assist in clearing up many problems in distribution that the present work necessarily leaves open questions.

The name of the author is a sufficient guaranty of excellence in the arrangement of the work. We note with pleasure a few minor points which indicate a progressive spirit: (1) The use of the metric system for all measurements. (2) The adoption of certain changes in nomenclature, recognized almost everywhere as necessary. (3) The change of some ordinal names, as *Violarieæ*, *Caryophylleæ*, *Onagrarieæ*, etc.

Space will not permit as full statistics of the Texas flora as would be interesting. The following comparisons are given to show contrasts of distribution and the richness of the flora in question:

Orders.	Texan Flora.		Chapman's Flora So. States.		Gray's Manual (*6th Ed.*)	
	Genera.	*Species.*	*Genera.*	*Species.*	*Genera.*	*Species.*
Ranunculaceæ	7	21	11	54	22	76
Violarieæ	2	5	2	17	3	20
Malvaceæ	14	53	12	40	11	25
Leguminosæ	52	203	56	191	46	156
Onagrarieæ	6	38	8	45	7	44
Cucurbitaceæ	10	12	4	4	5	5
Cactaceæ	4	71	2	6	2	6

We shall await the completion of the work with great interest.—L. M. Underwood.

[1] Coulter, John M.—Manual of the Phanerogams and Pteridophytes of Western Texas: Polypetalæ. Contrib. from U. S. Nat. Herb. ii. no. 1. 8vo. pp. 152. pl. 1. Washington: Government Printing office. 1891.

Work from a productive laboratory.

THREE PAPERS have recently appeared in the series of "Contributions from the Cryptogamic Laboratory of Harvard University," and reprinted from *Proc. Amer. Acad.*, 26. No. XIV is entitled "Preliminary notes on the species of Doassansia," by William Albert Setchell. This genus, growing upon aquatic hosts, is separated from all the other Entylomata by having a sorus invested with a cortex of sterile cells. The twelve species, three of which are new, are arranged under three subgenera. Two new genera are described, both closely related to Entyloma and Doassansia. The one, *Burrillia*, dedicated to Prof. T. J. Burrill, has a compact, solid sorus with little or no cortex, and is found on leaves of Sagittaria; the other, *Cornuella*, dedicated to Prof. Maxime Cornu, has a hollow sorus with no cortex, and grows on Lemna.

No. XV is "On the structure and development of Choreocolax Polysiphoniæ," by Herbert Maule Richards, and contains a double plate. After describing fully the structure and development of this obscure alga which is parasitic upon the common alga, Polysiphonia fastigiata, the author discusses its relationship to the rest of the Florideæ. It has heretofore been placed among the Gelidiaceæ, but Mr. Richards finds that the condition of the cystocarp places the plant in the order Chætangiaceæ.

No. XVI is entitled "On a Kephir-like yeast found in the United States," by Charles L. Mix. "Kephir" is a fermented milk of the Caucasus Mountains, and the yeast which causes this alcoholic fermentation of milk has been known, so far, in no other place. What are known as "Kephir-grains" are added to the milk to produce the fermentation. These grains when fresh are white, compact, elastic masses, enveloped by a slime, with a spherical or elliptical contour, and varying from 1 mm. to 5 cm. in diameter. Drying does not deprive them of life, and in this dried state they are kept for long periods, becoming dirty brown and hard as stone. The origin of these grains seems to be unknown, no wild form of yeast having been found from which they might have been cultivated. They are said to grow in little clumps or granules on peculiar bushes found on the mountains just beneath the snow line. In 1881 Edouard Kern published the first account of the Caucasian "Kephir." The grains are composed of yeast cells and bacteria embedded in a zoöglœa mass. Exposed to unfavorable conditions the bacteria cells grow out into Leptothrix threads, with spore formation, and Kern named this Kephir bacterium Dispora Caucasica, a new genus and species. The recent study of Mr. Mix was suggested by the receipt by Dr. Farlow of two sets of specimens, one from On-

tario and the other from New Jersey, resembling the Kephir grains described by Kern. Mr. Mix has examined them thoroughly, both in their structure and effects on milk, and has come to the conclusion that they are the same as the Kephir grains of the Caucasus. The paper closes with a discussion of the theories of this Kephir fermentation.

Minor Notices.

DR. V. F. BROTHERUS AND TH. SÆLAN have published an enumeration of the mosses of the Kola peninsula of Lapland[1] together with a discussion of their distribution. The Kola peninsula lies between the White Sea and the Arctic Ocean, and is almost wholly north of the Arctic Circle. The enumeration of 309 species belonging to 72 genera indicates, therefore, a very rich moss-flora. The nomenclature follows Lindberg.

THE CHICAGO ACADEMY OF SCIENCES has been rather lethargic, but we are reminded of its existence by the recent publication of No. 1 of the Second Volume of its *Bulletin*. This is a "Flora of Cook Co., Ills., and a part of Lake Co., Ind.," by William K. Higley and Charles S. Raddin, and makes a pamphlet of 168 pages.

The list itself is preceded by a tribute to Henry Homes Babcock, who, twenty years ago, was Chicago's most indefatigable and zealous botanist, and the director of her ephemeral botanic garden. An account of the geology of Cook Co., and items regarding the forest trees, disappearance of species, localities of interest and statistics from the catalogue find a place in the introduction. The list includes 1336 species and varieties, of which 187 are introduced and the remainder native. The names used are those of Gray's Manual (6th ed.), with a few exceptions, though the authors "cannot entirely indorse the nomenclature." It is a pity that they did not use it throughout, since their use of it would not imply indorsement.

THE INVALUABLE "Host Index to the Fungi of the United States," by Dr. W. G. Farlow and A. B. Seymour is now completed by the publication of part III. (Cambridge, June, 1891). The present part contains the Endogens, Coniferæ, Cryptogams and Animals; followed by copious addenda, corrigenda and a full index. The 219 pages of the complete work represent an enormous amount of painstaking labor. We hope that the authors will have their reward in a large sale of the work. They may certainly take what reward there is in the consciousness of having done their fellow workers a most important service.

[1] Musci Lapponiæ Kolaënsis. Extract from Acta Soc. pro Fauna et Flora Fennica, VI. 8vo. pp. 100, with map. Helsingfors, 1890.